

**Project WET  
Connections to KY  
Core Content 4.1**

**Color Me a Watershed p.223**

**Elementary**

**Mathematics**

MA-05-1.3.1

Students will analyze real-world problems to identify appropriate representations using mathematical operations, and will apply operations to solve real-world problems with the following constraints:

- add, subtract, multiply, and divide whole numbers (less than 100,000,000), using technology where appropriate;
- add and subtract fractions with like denominators through 16, with sums less than or equal to one and
- add and subtract decimals through hundredths.

DOK 2

MA-04-2.1.6

Students will estimate weight, length, perimeter, area, angle measures and time using appropriate units of measurement.

MA-05-2.1.6

Students will estimate weight, length, perimeter, area, angle measures and time using appropriate units of measurement. DOK 2

**Social Studies**

SS-EP-4.1.1

Students will use geographic tools (e.g., maps, globes, mental maps, charts, graphs) to locate and describe familiar places at home, school and the community.

SS-04-4.1.1

Students will use geographic tools (e.g., maps, charts, graphs) to identify and describe natural resources and other physical characteristics (e.g., major landforms, major bodies of water, weather, climate, roads, bridges) in regions of Kentucky and the United States. DOK 2

SS-05-4.1.1

Students will use geographic tools (e.g., maps, charts, graphs) to identify natural resources and other physical characteristics (e.g., major landforms, major bodies of water, weather, climate, roads, bridges) and analyze patterns of movement and settlement in the United States. DOK 3

**SS-EP-4.1.2**

Students will use geographic tools to identify major landforms (e.g., continents, mountain ranges), bodies of water (e.g., oceans, major rivers) and natural resources on Earth's surface and use relative location.

**SS-04-4.1.2**

Students will use geographic tools to locate major landforms, bodies of water, places and objects in Kentucky by their absolute and relative locations.

**SS-05-4.1.2**

Students will use geographic tools to locate and describe major landforms, bodies of water, places and objects in the United States by their absolute location. DOK 2

## **Middle School**

### **Mathematics**

**MA-06-1.3.1**

Students will add, subtract, multiply and divide whole numbers, fractions and decimals to solve real-world problems and apply order of operations to simplify numerical expressions. DOK 2

**MA-07-1.3.1**

Students will add, subtract, multiply and divide whole numbers, fractions and decimals to solve real-world problems and apply order of operations (including positive whole number exponents) to simplify numerical expressions. DOK 2

**MA-08-1.3.1**

Students will add, subtract, multiply and divide rational numbers to solve real-world problems and apply order of operations (including positive whole number exponents) to simplify numerical expressions. DOK 2

**MA-06-1.4.1**

Students will describe and apply ratios to solve real-world problems. DOK 2

**MA-07-1.4.1**

Students will apply ratios and proportional reasoning to solve real-world problems (e.g., percents, sales tax, discounts, rate). DOK 3

**MA-08-1.4.1**

Students will apply ratios and proportional reasoning to solve real-world problems (e.g., percents, constant rate of change, unit pricing, percent of increase or decrease). DOK 3

**Social Studies**

SS-06-4.1.1

Students will use a variety of geographic tools (maps, photographs, charts, graphs, databases, satellite images) to interpret patterns and locations on Earth's surface in the present day. DOK 3

SS-08-4.1.1

Students will use a variety of geographic tools (maps, photographs, charts, graphs, databases) to interpret patterns and locations on Earth's surface in United States history prior to Reconstruction. DOK 3

## **High School**

**Mathematics**

MA-HS-1.3.1

Students will solve real-world and mathematical problems to specified accuracy levels by simplifying expressions with real numbers involving addition, subtraction, multiplication, division, absolute value, integer exponents, roots (square, cube) and factorials. DOK 2

MA-HS-1.4.1

Students will apply ratios, percents and proportional reasoning to solve real-world problems (e.g., those involving slope and rate, percent of increase and decrease) and will explain how slope determines a rate of change in linear functions representing real-world problems.

**Social Studies**

SS-HS-4.1.1

Students will use a variety of geographic tools (e.g., maps, globes, photographs, models, satellite images, charts, graphs, databases) to explain and analyze the reasons for the distribution of physical and human features on Earth's surface. DOK 3

SS-HS-4.1.3

Students will use geographic tools (e.g., maps, globes, photographs, models, satellite images) to interpret the reasoning patterns (e.g., available transportation, location of resources and markets, individual preference, centralization versus dispersion) on which the location and distribution of Earth's human features is based.

## **Extension:**

**Social Studies**

SS-05-3.1.1

Students will describe scarcity and explain how scarcity required people in different periods in the U.S. (Colonization, Expansion, Twentieth Century to Present) to make economic choices (e.g., use of productive resources- natural, human, capital) and incur opportunity costs.

DOK 2

SS-05-4.1.1

Students will use geographic tools (e.g., maps, charts, graphs) to identify natural resources and other physical characteristics (e.g., major landforms, major bodies of water, weather, climate, roads, bridges) and analyze patterns of movement and settlement in the United States. DOK 3

SS-05-5.1.1

Students will use a variety of primary and secondary sources (e.g., artifacts, diaries, maps, timelines) to describe significant events in the history of the U.S. and interpret different perspectives. DOK 3

SS-EP-5.2.3

Students will describe change over time in communication, technology, transportation and education in the community.

SS-06-4.1.1

Students will use a variety of geographic tools (maps, photographs, charts, graphs, databases, satellite images) to interpret patterns and locations on Earth's surface in the present day. DOK 3

SS-08-4.1.1

Students will use a variety of geographic tools (maps, photographs, charts, graphs, databases) to interpret patterns and locations on Earth's surface in United States history prior to Reconstruction. DOK 3

SS-06-3.1.1

Students will explain and give examples of how scarcity requires individuals, groups and governments in the present day to make decisions about how productive resources (natural resources, human resources capital goods) are used. DOK 2

SS-08-3.1.1

Students will explain and give examples of how scarcity required individuals, groups and the government in the United States prior to Reconstruction to make decisions about how productive resources (natural resources, human resources, capital goods) were used. DOK 2

SS-06-5.1.1

Students will use a variety of tools (e.g., primary and secondary sources) to describe and explain historical events and conditions and to analyze the perspectives of different individuals and groups (e.g., gender, race, region, ethnic group, age, economic status, religion, political group) in present day regions.

#### SS-08-5.1.1

Students will use a variety of tools (e.g., primary and secondary sources) to describe and explain historical events and conditions and to analyze the perspectives of different individuals and groups (e.g., gender, race, region, ethnic group, age, economic status, religion, political group) in U.S. history prior to Reconstruction. DOK 3

#### SS-08-5.2.3

Students will explain how the growth of democracy and geographic expansion occurred and were significant to the development of the United States prior to Reconstruction. DOK 3

#### SS-HS-4.1.1

Students will use a variety of geographic tools (e.g., maps, globes, photographs, models, satellite images, charts, graphs, databases) to explain and analyze the reasons for the distribution of physical and human features on Earth's surface. DOK 3

#### SS-HS-4.4.2

Students will explain how human modifications to the physical environment (e.g., deforestation, mining), perspectives on the use of natural resources (e.g., oil, water, land), and natural disasters (e.g., earthquakes, tsunamis, floods) may have possible global effects (e.g., global warming, destruction of the rainforest, acid rain) in the modern world (1500 A.D. to present) and United States (Reconstruction to present). DOK

#### SS-HS-5.1.1

Students will use a variety of tools (e.g., primary and secondary sources, data, artifacts) to analyze perceptions and perspectives (e.g., gender, race, region, ethnic group, nationality, age, economic status, religion, politics, geographic factors) of people and historical events in the modern world (1500 A.D. to present) and United States History (Reconstruction to present). DOK 3